3. (Previously amended) A crystal growth method according to claim 1, wherein the compound semiconductors A and B are alternatively and periodically grown by MOCVD on said substrate to form said multi-layered buffer.

4. (Previously amended) A crystal growth method according to claim 1, wherein the compound semiconductors A and B are alternatively grown by MOCVD on a substrate with the thickness of the layers varying from one to another to form said multi-layered buffer.

5. (Original) A crystal growth method according to claim 1, wherein a number of compound semiconductors A, B, C . . . . . form a sequence of ABC. . . . . wherein said sequence is alternately grown on said substrate at said first temperature to form said multi-layered buffer, and wherein said compound semiconductors are different from each other in lattice constant, energy band gap, layer thickness, and composition.

6. (Original) A crystal growth method according to claim 1, wherein said substrate is made of sapphire wafer with any possible orientation.

7. (Original) A crystal growth method according to claim 1, wherein said first temperature is around 525 °C and said second temperature is around 1,050 °C.

8. (Original) A crystal growth method according to claim 3, wherein said multi-layered buffer consists of three periods of repeated AB units and the total layer thickness of said multi-layered buffer is approximately 24 nm.

9. (Original) A crystal growth method according to claim 3, wherein said compound semiconductors A and B are made of GaN and $Ga_xAl_{1-x}N$ ($0 \leq x \leq 1$), respectively.

10. (Original) A crystal growth method according to claim 3, wherein said compound semiconductors A and B are made of GaN and $Ga_yIn_{1-y}N$ ($0 \leq y \leq 1$), respectively.

11. (Original) A crystal growth method according to claim 5, wherein said compound semiconductors A, B, C, ... are made of GaN, $Ga_xAl_{1-x}N$ ($0 \leq x \leq 1$), $Ga_yIn_{1-y}N$ ($0 \leq y \leq 1$) . . . . . , respectively.

12. (Currently amended) A group-III nitride compound semiconductor, comprising:

a MOCVD-grown periodic or non-periodic ~~inactive~~ intermediate multi-layered buffer having at least three layers with each layer having a thickness in the range from 2 nm to 6 nm on a substrate grown at a first temperature in which the layers alternate between at least two

types of compound semiconductors A and B different from each other in lattice constant, energy band gap, layer thickness, and composition, said intermediate multi-layered buffer being amorphous or polycrystalline when formed at said first temperature; and

a MOCVD-grown layer of a group-III nitride compound semiconductor on the formed ~~inactive~~ intermediate multi-layered buffer wherein said layer of group-III is formed at a temperature that is higher than said first temperature and said intermediate multi-layered buffer adjoins said layer of group-III nitride compound and said substrate, said intermediate multi-layered buffer being partially recrystallized at the higher temperature, thereby relieving strain between said layer of group III nitride compound and said substrate, and facilitating improved crystalline quality of said group-III nitride compound.

13. (Previously amended) A method as recited in claim 1 wherein the multi-layered buffer thickness is less than 96 nm.

14. (Previously amended) A method as recited in claim 1 wherein the multi-layered buffer thickness is less than 48 nm.